

Amendment to the claims

Please cancel claims 1-6, 11, 13-18, 23 and 25-37.

The listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

1-6 (cancelled)

7. (currently amended) A method for determining whether a plant cell has incorporated and expresses a polynucleotide, the method comprising:

introducing into a the cell a construct comprising a polynucleotide encoding an enzyme having organophosphate hydrolase activity;

contacting the cell or progeny of said cell with an organophosphate such that if the cell contains the construct and an enzyme having organophosphate hydrolase activity is thereby expressed, the enzyme having organophosphate hydrolase activity hydrolyzes the organophosphate; and

detecting the hydrolysis such that extraction of the hydrolysis product from the cell is not necessary to detect the hydrolysis,

thereby determining whether the cell has incorporated a polynucleotide under conditions that do not require destruction of the cell.

8. (original) The method of claim 7, wherein the organophosphate is selected from the group consisting of acephate, azinophos-methyl, demeton-S-methyl, malathion, phosalone, amiprotophos-methyl, bensulide, butamiphos, piperophos, paraoxon, DFP, coumaphos, soman, and VX.

9. (original) The method of claim 7, wherein the organophosphate is amiprotophos-methyl.

10. (original) The method of claim 7, wherein the polynucleotide is SEQ ID NO:1.

11. (cancelled)

12. (original) The method of claim 11, wherein the plant cell is a maize plant cell.

13-18 (cancelled)

19. (currently amended) A method for determining whether a plant cell has incorporated a first polynucleotide, the method comprising:

introducing into a the cell a construct comprising a first polynucleotide and a second polynucleotide, wherein the second polynucleotide encodes an enzyme having organophosphate hydrolase activity;

contacting the cell or progeny of said cell with an organophosphate such that if the cell contains the construct and an enzyme having organophosphate hydrolase activity is thereby expressed, the enzyme having organophosphate hydrolase activity hydrolyzes the organophosphate; and

detecting the hydrolysis such that extraction of the enzyme from the cell is not necessary to detect the hydrolysis,

thereby determining whether the cell has incorporated a first polynucleotide under conditions that do not require destruction of the cell

20. (original) The method of claim 19, wherein the organophosphate is selected from the group consisting of acephate, azinophos-methyl, demeton-S-methyl, malathion, phosalone, amiprotophos-methyl, bensulide, butamiphos, piperophos, paraoxon, DFP, coumaphos, soman, and VX.

21. (original) The method of claim 19, wherein the organophosphate is amiprotophos-methyl.

22. (original) The method of claim 19, wherein the second polynucleotide is SEQ ID NO:1.

23. (cancelled)

24. (amend) The method of claim 23 19, wherein the plant cell is a maize plant cell.

25.-37 (cancelled)

38. (previously amended) The method of claim 7, wherein hydrolysis is detected by a method selected from the group consisting of visual observation of products produced by hydrolysis, fluorescence, phosphorescence and spectrophotometry.

39. (previously amended) The method of claim 7, wherein hydrolysis is detected by fluorescence.

40. (previously amended) The method of claim 7, wherein hydrolysis is detected by phosphorescence.
41. (new) The method of claim 7, wherein hydrolysis results in growth advantage of the cell compared to cells which do not have the construct.